

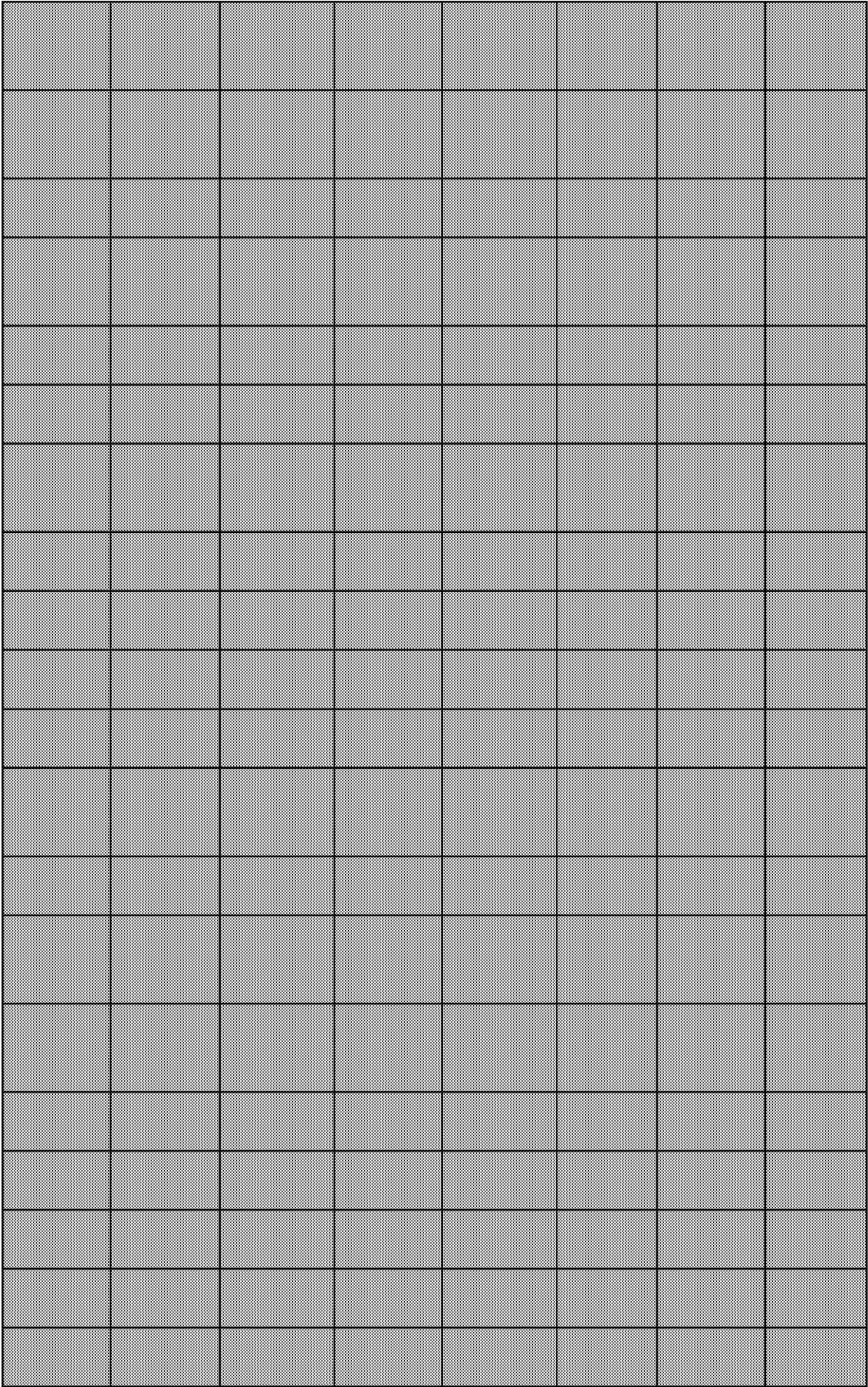
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Pulmonary fibrosis is one of the most severe consequences of exposure to paraquat, an herbicide that causes rapid alveolar destruction.
PURPOSE: Evidence supports the immune system activity accompanying glaucomatous neurodegeneration. This study aimed to determine whether the immune system activity is a primary or secondary event in the pathogenesis of glaucoma.
Plant cells frequently encounter oxidative stress, leading to oxidative damage and inactivation of proteins. We have recently identified a novel mutation, G11778A, in the subunit ND4 gene of NADH dehydrogenase complex is the most common primary mutation found in Leber's hereditary optic neuropathy.
At harvest, sunflower (<i>Helianthus annuus</i> L.) seeds are dormant and unable to germinate at temperatures below 15 degrees Celsius.
Metallothionein (MT), a ubiquitous family of low-molecular weight metal-binding proteins, comprises 30% cysteine residues and is involved in metal homeostasis and detoxification.
Paraquat (PQ) (1, 1'-dimethyl-4, 4'-bipyridinium dichloride), a widely used herbicide, has been suggested as a potential environmental carcinogen.
Studies suggest that disturbances of amino acid metabolism and cellular iron regulation are important mechanisms underlying the pathogenesis of Friedreich's ataxia.
Experiments with isolated mitochondria have established that these organelles are pivotal intracellular sources of superoxide anion and hydrogen peroxide.
Stress-induced generation of reactive oxygen species (ROS) leads to lowering of the biochemical yield of photosynthesis in <i>Chlorella vulgaris</i> .
The beta-carboline alkaloids found in medical plants and in a variety of foods, beverages and cigarette smoke have a range of pharmacological activities.
The mitochondrial succinate dehydrogenase (SDH) is an essential component of the electron transport chain and of the tricarboxylic acid cycle.
The aim of this investigation was to test the reactions of the hepatopancreatic digestive cells of blue mussels (<i>Mytilus edulis</i>) to various stressors.
Targeting of the antioxidant enzyme catalase to endothelial cells protects against vascular oxidative stress induced by hypercholesterolemia.
To understand the physiological function of glutaredoxin, a thiotransferase catalyzing the reduction of mixed disulfides of proteins and glutathione.
Carcinogenesis by vanadium is thought to occur through induction of DNA-double-strand breaks (DSBs) but its mechanism is not clear.
Oxidative damage contributes to retinal cell death in patients with age-related macular degeneration or retinitis pigmentosa.
Mitochondria, which are a major source of intracellular reactive oxygen species (ROS), are extremely vulnerable to oxidative damage.
Interruption of insulin-like growth factor I (IGF-1) signaling has been demonstrated to prolong life span although the underlying mechanism is not clear.
Salt Overly Sensitive 1 (SOS1), a plasma membrane Na ⁺ /H ⁺ antiporter in <i>Arabidopsis</i> , is a salt tolerance determinant crucial for plant growth under saline conditions.

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Paraquat (PQ) is a highly toxic herbicide that is used in most of the countries without restriction. The cytotoxic effect of P
Paraquat (1,1'-dimethyl-4,4'-bipyridinium dichloride) is widely used as a redox cycler to stimulate superoxide production
Superoxide anion generation plays an important role in the development of paraquat toxicity. Although superoxide dismutase
The PGC1 transcriptional coactivators are major regulators of several crucial aspects of energy metabolism. PGC1alpha co
The objective of this in vitro study was to use a mouse embryonic stem (mES) cell model to better understand pesticide i
G(M1)-gangliosidosis is an autosomal recessive lysosomal lipid storage disorder, caused by mutations of the lysosomal b
The primary biochemical reaction of purple acid phosphatases (PAP) is to catalyze the hydrolysis of phosphate esters and
The PGC1 transcriptional coactivators are major regulators of several crucial aspects of energy metabolism. PGC1alpha co
In protein therapy, it is important for exogenous protein to be delivered into the target subcellular localization. To trans
The basidiomycete <i>Moniliophthora perniciosa</i> causes Witches' Broom disease in <i>Theobroma cacao</i> . We studied the influ
Oxidative stress has been implicated in allergic responses. SHP-1 is a target of oxidants and has been reported as a negat
The formation of the proamniotic cavity is the first indication of programmed cell death associated to a morphogenetic p
Oxidative stress and inflammation are implicated in the pathogenesis of many age-related diseases. Stress-induced overp
OBJECTIVE: Cilostazol, a selective inhibitor of PDE3, has a protective effect on endothelium after ischemic vascular damag
UCP2, an inner membrane mitochondrial protein, has been implicated in bioenergetics and reactive oxygen species (ROS
Accumulation of misfolded oxidant-damaged proteins is characteristic of many diseases and aging. To understand how c
We hypothesize that neurons have protective mechanisms against adverse local conditions that improve the chances of c
It is known that expression of the <i>Agrobacterium rhizogenes</i> rolC gene in transformed plant cells causes defense-like rea
Silver ions have been widely used as disinfectants that inhibit bacterial growth by inhibiting the essential enzymatic func
Manganese-dependent superoxide dismutase (SOD2) serves as the primary defense against mitochondrial superoxide, a
Aging is accompanied by an accumulation of oxidized proteins and cross-linked modified protein material. The intracellu
Resveratrol, a naturally occurring polyphenol, exhibits antioxidant, antiaging, and anticancer activity. Resveratrol has also

